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09/579,623	05/26/2000	Kemi Y. Ibitayo	Sprint IDF 1415	7837

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EXAMINER
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MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
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2165

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/579,623

Applicant(s)

IBITAYO ET AL.

Examiner

Tony Mahmoudi

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's Request for Continued Examination (RCE) submission filed on 26-May-2005 has been entered.

### ***Remarks***

2. In response to communications filed on 26-May-2005, claims 1-14 are presently pending in the application, of which, claims 1, 9 and 14 are presented in independent form.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2165

4. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley et al (U.S. patent No. 6,532,465) in view of Dong et al (U.S. Patent No. 6,499,023), and further in view of Lipkin (U.S. Patent No. 6,721,747.)

As to claim 1, Hartley et al teaches a framework (see Abstract, and see column 7, lines 12-13) for isolating a business component from specific implementations of a datastore (see column 5, lines 12-18, where “isolating a business component from specific implementation of a datastore” is read on “corresponding to one or more business objects that are highly specific to a client’s implementation), comprising:

(a) a database in communication with a business component (see figure 4, where “business component” is illustrated as “business objects 35, and “database” is illustrated as “database tables 39);

(b) a domain object factory in communication with the database (see figure 5, where “database” is illustrated as “external data source”);

(c) a domain object in communication with the domain object factory (see figure 4, where “domain object” is illustrated as “domain objects 37, and see “domain object factory 60 in figure 5); and

(d) a datastore in communication with the domain object (see “domain object factory 60” and “data store 65” in figure 5.)

Hartley et al does not teach a database wrapper; wherein the database wrapper provides an abstraction layer.

Art Unit: 2165

Dong et al teaches an object-focused workflow system (see Abstract) in which he teaches a database wrapper; wherein the database wrapper provides an abstraction layer (see column 5, lines 23-48.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al to include a database wrapper; wherein the database wrapper provides an abstraction layer.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al with the teaching of Dong et al because including a database wrapper; wherein the database wrapper provides an abstraction layer, would “provide abstract interfaces to the databases and reporting features of the other external components, exposing relevant data and update capabilities” , as taught by Dong et al (see column 5, lines 38-41.)

Hartley et al as modified, still does not teach providing an additional abstraction layer between the domain object factory and the business component.

Lipkin teaches method and apparatus for an information server (see Abstract), in which he teaches providing an additional abstraction layer between the domain object factory and the business component (see column 5, lines 26-32, see column 20, lines 16-22, see column 27, lines 4-8, and see column 29, lines 40-45.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al as modified, to include providing an additional abstraction layer between the domain object factory and the business component.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al as modified, by the teaching of Lipkin, because providing an additional abstraction layer between the domain object factory and the business component, would enable the system to improve portability between servers (see Lipkin, column 5, lines line 31), and to provide a richer level of functionality and to allow future modifications with minimal impact on the client application code (see Lipkin, column 27, lines 4-8.)

As to claim 2, Hartley et al as modified teaches wherein the database wrapper further comprises a database wrapper interface in communication with the business component (see Dong et al, column 5, lines 38-41) and a database wrapper implementation implementing the domain object factory (see Dong et al, column 4, lines 30-41, and see Hartley et al, figure s 4 and 5.)

As to claim 3, Hartley et al as modified teaches wherein the domain object factory further comprises a domain object interface in communication with the database wrapper (see Hartley et al, figure 5, and see column 12, lines 6-9) and a domain object factory implementation implementing the domain object (see Hartley et al, figure 5, and see column 11, lines 28-39.)

As to claim 4, Hartley et al as modified teaches wherein the domain object further comprises a domain object interface in communication with the domain object factory (see

Art Unit: 2165

Hartley et al, figures 4 and 5) and a domain object implementation retrieving data from a datastore (see Hartley et al, column 10, lines 58-67.)

As to claim 5, Hartley et al as modified teaches wherein the domain object interface further comprises a transient data converter for converting the domain object from a persistent state to a transient state (see Hartley et al, figure 13, and see column 16, lines 6-51, where “objects from a persistent state” is read on “data formats from outside sources”, and “transient state” is read on “standard formats”, and see column 21, lines 63-65.)

As to claims 6 and 11, Hartley et al as modified teaches wherein the datastore is a relational database (see Hartley et al, column 12, lines 6-12, and see column 21, lines 18-19, where “datastore” is read on “data storage device”).

As to claims 7 and 12, Hartley et al as modified teaches wherein the datastore is an object database (see Hartley et al, column 12, lines 12-14, where “object database” is read on “the master database including the stored domain objects”).

As to claims 8 and 13, Hartley et al as modified teaches wherein the datastore is accessed remotely (see Hartley et al, column 8, lines 33-37, and see column 21, lines 30-32.)

As to claim 9, Hartley et al teaches a method (see Abstract) for isolating a business component from specific implementations of a datastore (see column 5, lines 12-18, where

Art Unit: 2165

“isolating a business component from specific implementation of a datastore” is read on “corresponding to one or more business objects that are highly specific to a client’s implementation), comprising:

(a) interfacing a database to a business component (see figure 4, where “business component” is illustrated as “business objects 35, and “database” is illustrated as “database tables 39);

(c) interfacing a domain object factory to the database (see figure 5, where “database” is illustrated as “external data source”);

(d) implementing the domain object factory (see figure 5, and see column 11, lines 28-39);

(e) interfacing a domain object to the domain object factory (see figures 4 and 5); and

(f) implementing the domain object to retrieve data from a datastore (see column 10, lines 58-67.)

For the teaching of “a database wrapper; wherein the database wrapper provides an abstraction”, the applicant is kindly directed to the remarks and discussions made in claim 1 above, in view of the teachings of Dong et al.

For the teachings of “providing an additional abstraction layer between the domain object factory and the business component”, the applicant is kindly directed to the remarks and discussions made in claim 1 above, in view of the teaching of Lipkin.

As to claim 10, Hartley et al as modified teaches the method further comprising converting data received from the datastore from a persistent state to a transient state (see



Art Unit: 2165

Hartley et al, figure 13, and see column 16, lines 6-51, where “objects from a persistent state” is read on “data formats from outside sources”, and “transient state” is read on “standard formats”, and see column 21, lines 63-65.)

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley et al (U.S. patent No. 6,532,465) in view of McComb et al (U.S. Patent No. 6,006,224), and further in view of Lipkin (U.S. Patent No. 6,721,747.)

As to claim 14, Hartley et al teaches a method for (see Abstract) isolating a business component from specific implementations of a datastore (see column 5, lines 12-18, where “isolating a business component from specific implementation of a datastore” is read on “corresponding to one or more business objects that are highly specific to a client’s implementation), comprising:

- (a) supplying a database (see figure 2);
- (c) using the database to obtain a domain object factory (see figure 5);
- (d) using the domain object factory to create a domain object (see figure 5, and see column 11, lines 28-39);
- (e) converting the domain object from a persistent state to a transient state (see figure 13, and see column 16, lines 6-51, where “objects from a persistent state” is read on “data formats from outside sources”, and “transient state” is read on “standard formats”, and see column 21, lines 63-65);

Hartley et al does not teach:

Art Unit: 2165

supplying a database wrapper;  
using the database wrapper to begin a database session;  
ending the database session; and  
returning the domain object to the business component.

McComb et al teaches a crucible query system (see Abstract) in which he teaches:

supplying a database wrapper (see figure 2);  
using the database wrapper (see column 7, lines 51-59) to begin a database session (see column 8, lines 41-42, where “begin a database session” is read on “open a connection to the specified database”);  
ending the database session (see column 8, line 43, where “end the database session” is read on “close a database connection”); and  
returning the domain object to the business component (see column 9, lines 61-64.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al to include supplying a database wrapper; using the database wrapper to begin a database session; ending the database session; and returning the domain object to the business component.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al with the teachings of McComb et al, because supplying a database wrapper would provide the system with “re-useable code that encapsulates procedural code in an application (such as a communication protocol or a database)”, where, “once encapsulated the item becomes an object”, as taught by McComb et al (see column 6, lines 14-17), and because using the database wrapper to begin a database

Art Unit: 2165

session; ending the database session; and returning the domain object to the business component, would enable the system to communicate with various databases using standard database query languages, and therefore, would increase the flexibility and inter-operability of the system.

Hartley et al as modified still does not teach providing an additional abstraction layer between the domain object factory and the business component.

Lipkin teaches method and apparatus for an information server (see Abstract), in which he teaches providing an additional abstraction layer between the domain object factory and the business component (see column 5, lines 26-32, see column 20, lines 16-22, see column 27, lines 4-8, and see column 29, lines 40-45.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al as modified, to include providing an additional abstraction layer between the domain object factory and the business component.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al as modified, by the teaching of Lipkin, because providing an additional abstraction layer between the domain object factory and the business component, would enable the system to improve portability between servers (see Lipkin, column 5, lines line 31), and to provide a richer level of functionality and to allow future modifications with minimal impact on the client application code (see Lipkin, column 27, lines 4-8.)

6. Claims 5 and 10 are *further* rejected under 35 U.S.C. 103(a) as being unpatentable over Hartley et al (U.S. patent No. 6,532,465) in view of Dong et al (U.S. Patent No. 6,499,023), and further in view of Lipkin (U.S. Patent No. 6,721,747), as applied to claims 1-13 above, and still further in view of Brownell et al (U.S. Patent No. 6,009,266.)

As to claims 5 and 10, in addition to the teaching of Hartley et al, as modified, on converting domain object/data from a persistent state to a transient state (see Hartley et al, figure 13, and see column 16, lines 6-51, where “objects from a persistent state” is read on “data formats from outside sources”, and “transient state” is read on “standard formats”, and see column 21, lines 63-65), Brownell et al teaches methods, apparatus and data structures for managing transient and persistent distributed objects (see Abstract), in which he teaches a transient data converter for converting the domain object from a persistent state to a transient state (see figure 4a, and see column 11, lines 1-17.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al as modified to include a transient data converter for converting the domain object from a persistent state to a transient state.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hartley et al as modified, by the teaching of Brownell et al, because a transient data converter for converting the domain object from a persistent state to a transient state, would enable the system to move object data from permanent storage devices into a temporary storage device, such as cache memory, so that the objects

Art Unit: 2165

can be in transit and can be shared/distributed to other computers which are a part of the distributed object operating environment.

***Response to Arguments***

7. Applicant's declaration under rule 1.131, filed on 26-May-2005, has been fully considered but it is ineffective to overcome the Lipkin reference (U.S. Patent No. 6,721,747.)

The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of **37 CFR 1.131(b)**. *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974).

Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.") See GENERAL REQUIREMENTS in MPEP §715.07.

In general, proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose. See "THREE WAYS TO SHOW PRIOR INVENTION" in MPEP §715.07. The examiner cannot establish, via the submitted declaration and the accompanying exhibits, that the invention "***actually existed and worked for its intended purpose***" at the time of the claimed reduction to practice.

The declaration and the accompanying exhibits do not provide evidence to support all the claimed limitations prior to the reference date, therefore, do not support the “actual reduction to practice” of the claimed invention prior to the effective date of the Lipkin reference.

For example, there is no clear reference or explanation of the exhibits or positive statement on the declaration to support the limitation “wherein the database wrapper provides an additional abstraction layer between the domain object factory and the business component”, as recited in independent claims 1, 9 and 14. Applicant has not given a clear explanation pointing out exactly what facts are established and relied upon from the exhibit(s) with respect to this particular limitation. Applicant’s references made in the declaration to the “Java\_Persistence\_Framework\_Overview.ppt” (exhibit B) are facts that are not sufficient to support the aforementioned limitation in the above referenced independent claims.

The aforementioned limitation of the above claims merely provides one example of insufficient evidence supporting the “actual reduction to practice” of the instant invention. It is to be understood that there are other limitations that are not sufficiently supported by the evidence provided by the declaration itself and/or the accompanying exhibits.

The applicant’s remarks regarding the examiner’s statements in the previous Office Action regarding the “establishment of diligence” is hereby noted by the examiner.

Art Unit: 2165

***Conclusion***


8. In view of the above examples and the requirements set forth by the MPEP, the examiner is maintaining the validity of the reference(s) cited in the previous and the present Office Actions as appropriate "prior art" to the claims of the present invention.

9. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (571) 272-4078. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

tm

July 15, 2005

  
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